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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,051	09/13/2005	Balbino Fernandez Garcia	3219	6985

7590
Striker Striker & Stenby
103 East Neck Road
Huntington, NY 11743

01/11/2007

EXAMINER

TRIEU, THAI BA

ART UNIT	PAPER NUMBER
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3748

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/521,051

Applicant(s)

FERNANDEZ GARCIA, BALBINO

Examiner

Thai-Ba Trieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 09/13/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

The Preliminary Amendment filed on September 13, 2005 is acknowledged.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The listing of references in the specification (See Page 1, in Background of the Invention, lines 9-10) is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "2", "13", and "18" have been used to designate "chamber" (See Figure 6). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures

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appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

1. IN THE ABSTRACT:

Since the abstract is too long, applicant is required to submit a substitute abstract to meet the requirement set forth below:

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to **a single paragraph on a separate sheet within the range of 50 to 150 words**. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. IN THE SPECIFICATION:

The disclosure is objected to because of the following informalities:

- On Pages 2-4, in the Description of the Invention, ***“said”*** should be replaced by -- ***the*** – (See lines 4, 11, 20, 22, 24, 25, 28, 34 of Page 2, etc...).
- On Page 4, line 7, ***“intake (9)”*** should be replaced by – ***intake (19)*** – *(for correcting typo error and maintaining consistency of the whole specification).*

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1 and its dependent claims 2-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically,

- In claim 1:

a. Line 2, “radial housings” renders the claim indefinite, since it is not clear that how many radial housings are there in the instant engine. Applicant is required to identify these housings or revise the claimed limitation.

b. Lines 6-7, the recitation of “between them” renders the claim indefinite, since it is not clear that to which elements/components the term “them” is used to replaced such as between blades, between the housings and the rotor, or between the rotor and stator, applicant is required to identify these housings or revise the claimed limitation.

Additionally, the term "the same" renders the claim indefinite, since it is not clear that which limitations such as the same size, the same shape, the same movement, the same rotation etc... are to be claimed. Applicant is required to identify these housings or revise the claimed limitation.

2. Claim 5 recites the limitation "the spark plug" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Alessandri (Pub. Number EP 582 555 A1).

Alessandri discloses an explosion or internal combustion rotary engine, of the type structured by means of a cylindrical rotor (1) with radial housings for a plurality of blades (2) defining chambers (50) in a tubular stator (10), of generally cylindrical inner configuration, which is closed by means of end covers (Not Numbered) (See Figure 2), characterized in that the stator (10) includes an inner wall (100) of elliptical section, while the rotor (1) includes eight radial blades (2) properly interrelated such that the retraction movement of part of them is combined with the ejection movement of the

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others in order for the mechanical relationship existing between them to determine that the same are kept in permanent contact with the inner wall (100) of the stator (10);

characterized in that said blades (q) include, in correspondence with their lower apexes, respective shafts (18) to which pairs of articulated connecting rods (40) are hingedly joined (at 41), with the special characteristic that four articulated connecting rods (40) are hingedly joined to four blades (2) at each end of the engine, configuring an articulated parallelogram, while another four blades (2) are hingedly joined to the other four blades (2), configuring a second articulated parallelogram, and such that these two parallelograms are angularly offset, each one of them affecting four blades in alternate arrangement with respect to the other four (See Figure 1); and

characterized in that said articulated connecting rods (40) are located in a pair of chambers established between the ends of rotor (1) and the covers (Not Numbered) closing the tubular body (10) constituting the stator (See Figures 1-2; Pages 2-4, lines 1-58, and Page 5, lines 1-10).

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Drehkoben-Kraftmaschinen (Patent Number DE 678,971), or Schobert (Patent Number 819,935), or Crutchfield (Patent Number 4,241,713, or Holdampf (Patent Number 4,711,268).

Drehkoben-Kraftmaschinen discloses an explosion or internal combustion rotary engine, of the type structured by means of a cylindrical rotor with radial housings (Not Numbered) for a plurality of blades defining chambers (Not Numbered) in a tubular

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stator, of generally cylindrical inner configuration, which is closed by means of end covers (Not shown), characterized in that the stator (Not Numbered) includes an inner wall (Not Numbered) of elliptical section, while the rotor (Not Numbered) includes eight radial blades (IV) properly interrelated such that the retraction movement of part of them is combined with the ejection movement of the others in order for the mechanical relationship existing between them to determine that the same are kept in permanent contact with the inner wall (Not Numbered) of the stator (Not Numbered) (See Figures 1-2).

Schobert discloses an explosion or internal combustion rotary engine, of the type structured by means of a cylindrical rotor with radial housings (I) for a plurality of blades (IV) defining chambers (Not Numbered) in a tubular stator, of generally cylindrical inner configuration, which is closed by means of end covers (Not shown), characterized in that the stator (I) includes an inner wall (Not Numbered) of elliptical section, while the rotor (III) includes eight radial blades (IV) properly interrelated such that the retraction movement of part of them is combined with the ejection movement of the others in order for the mechanical relationship existing between them to determine that the same are kept in permanent contact with the inner wall (Not Numbered) of the stator (I) (See Figure).

Crutchfield discloses an explosion or internal combustion rotary engine (10), of the type structured by means of a cylindrical rotor with radial housings (12) for a plurality

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of blades (38) defining chambers (41) in a tubular stator, of generally cylindrical inner configuration, which is closed by means of end covers (22, 23), characterized in that the stator (12) includes an inner wall (Not Numbered) of elliptical section, while the rotor (24) includes eight radial blades (38) properly interrelated such that the retraction movement of part of them is combined with the ejection movement of the others in order for the mechanical relationship existing between them to determine that the same are kept in permanent contact with the inner wall (Not Numbered) of the stator (12) (See Figures 1 and 5-6, Column 2, lines 67-68, Column 3, lines 1-34).

Holdampf discloses an explosion or internal combustion rotary engine (10), of the type structured by means of a cylindrical rotor (14) with radial housings (12) for a plurality of blades (20) defining chambers (26) in a tubular stator, of generally cylindrical inner configuration, which is closed by means of end covers (22), characterized in that the stator (12) includes an inner wall (Not Numbered) of elliptical section, while the rotor (14) includes eight radial blades (20) properly interrelated such that the retraction movement of part of them is combined with the ejection movement of the others in order for the mechanical relationship existing between them to determine that the same are kept in permanent contact with the inner wall (Not Numbered) of the stator (12) (See Figures 1-2, Column 6, lines 7-27).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alessandri (Pub. Number EP 582 555 A1), in view of Hunter (Patent Number 3,951,112).

Alessandri discloses the invention as recited above, and further discloses a spark plug (See Page 4, lines 24-25).

However, Alessandri fails to disclose the structural details of the blades and small recesses communicating the chambers adjacent to each blade when the latter passes by a spark plug.

Hunter teaches that it is conventional in the rotary internal combustion engine art, to utilize each blade (45) includes its recessed outer edge (49), configuring a groove as a channel in which a segment is coupled with freedom of movement, which constitutes a bridge of union between the blade (45) and the wall (23) of the stator (22) and which adopts a configuration as an approximately cylindrical segment, each segment overlapping on its ends another two segments (50, 45) coupled in rectangular channels (43) of the ends of the blade (45); and its covers (20, 21), each include, at the level of the housing (22) of the stator for the spark plug (18, 19), small recesses (Not

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Numbered) communicating the chambers (A) adjacent to each blade (9) when the latter passes by a spark plug (See Figures 4-5, 7-10, and 12-23, and Column 3, lines 5-51).

It would have been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized the structural details of the blades and small recesses communicating the chambers adjacent to each blade when the latter passes by a spark plug, as taught by Hunter, to improve the efficiency of the Alessandri device, since the use thereof would have prevented the back flow and leaking around the vanes.

Conclusion

The IDS (PTO-1449) filed on September 13, 2005 has been considered. An initialized copy is attached hereto.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Kobayashi (US Patent Number 3,614,277) discloses a vane type rotary engine.
- Veitch (US Patent Number 869,339) discloses a rotary engine.
- Lefeuvre (Pub. Number WO 82/03250 A1) discloses a rotary piston machine.
- Mashaiky (Pub. Number DE 31 48 222 A) discloses a slide blade rotor.
- Buhmann (Pub. Number DE 35 29 429 A1) discloses a rotary engine.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (571) 272-4867. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TTB
January 02, 2007



Thai-Ba Trieu
Primary Examiner
Art Unit 3748